NORTHERN MESSENGER

DEVOTED TO TEMPERANCE, SCIENCE, EDUCATION, AND AGRICULTURE.

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NOTICE.

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AQUATIC ENGINEERS.

Perhaps nothing strikes the earnest and reverent student of natural history more thoughtfully than the special adaptations of certain creatures to distinct habits of life. They are so numerous that his studies are beset by them at every step. To him it is overwhelming proof of creational wisdom and goodness, for by this specialization animal structures attain the highest degree of mechanism, and brute intelligence soars to its loftiest flights.

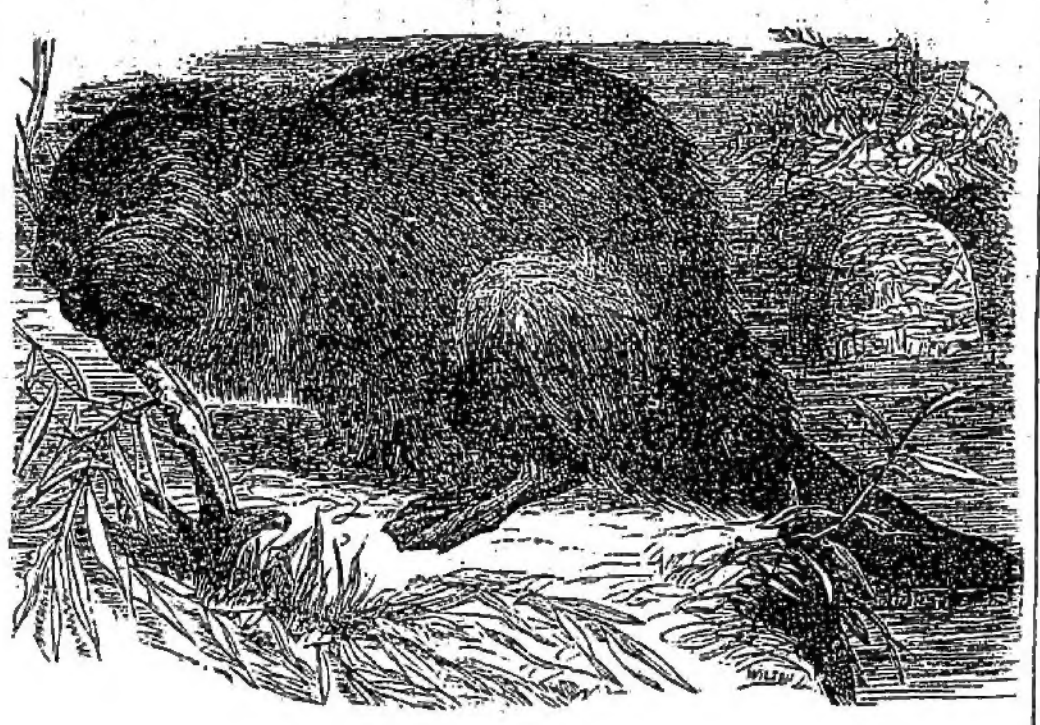
The beaver offers us such an example of mental and animal adaptation as we here speak of, and in it the principle is perhaps more interestingly developed, on account of the evident manner in which its application varies in degree, according as circumstances may require.

The habits of the European and the American species differ in some degree. The former do not habitually build the famous dams and huts, which the latter are so well known for, and in the construction of which they show such a degree of ingenuity and sagacity that we have not hesitated to call them "Aquatic Engineers."

Formerly the European beaver was most abundant, and had a very extensive geographical distribution. Its decrease in numbers and extinction in localities appear to be in proportion to the spread of population and the development of civilization. The beaver loves solitary rivers and streams. As man becomes civilized he requires those rivers to sail his vessels upon, and their currents to turn his mills with. The beaver, therefore, must retire.

The American beaver is now enjoying a fine time of it. It is now rarely found east of the Missouri river; although it once ranged from the most easterly to the most westerly point of the American continent, and in the other direction from Labrador to New Mexico. No other American animal has suffered so much from the hands of the hunter and trapper as the beaver. Some of our readers may remember the time when "beaver hats" were all the rage. This was in the days before "silk" hats were thought of. European fashion affected that style of hat, and the beaver was hunted down to satisfy it. The Hudson Bay Company then imported no fewer that eighty thousand beaver skins in a year into Great Britain alone! The ease with which the fur could be felted was their chief recommendation. But the introduction of "silk" hats came most opportunely for the American beaver, otherwise it would by this time have been hunted to utter extinction. The consequence is that beaver-trapping, to which many men devoted themselves more than a quarter of a century ago, no longer pays, and is practically given up. The beavers, like all other rodents, are animals which multiply very rapidly, and so we find they are fast taking up their old positions on the lakes, rivers, and creeks of North America, where quiet and solitude still reign supreme.

Our readers have doubtless heard of the rapidity with which beavers can cut down trees. Before speaking as to the reason for this, it will be worth our while to note the peculiar structure of the tools with which the beaver works. These are its teeth. The two incisors, or "cutting teeth," in the upper and lower jaws, are very largely developed. The teeth which are usually placed next to them in other animals (the "canines") are absent; so that we can see how arrangements are thus made for the enormous growth of the incisor teeth. These are long and curved, and are only covered with hard enamel in front, the sides and hinder parts being unprotected. It follows, therefore, that the hinder part wears away soonest, and thus a sharp chisel-like edge is always kept on the front enamelled portion. These chisel-shaped incisor teeth are supplied with persistent pulps, so that they grow during the whole life of the beaver, and it thus becomes imperatively necessary that it shall gnaw in order to prevent the growth from being a nuisance and evil. This is one reason why rats and mice gnaw so much, and not because they are always seeking food. The manner in which the lower jaw is jointed on to the skull, so as to allow the to-and-fro movement we call gnawing or nibbling, is peculiar to the rodents as an order. In the carnivorous animals the movement is up and down, like that of a pair of scissors, and is especially adapted for cutting. In the herbivorous animals generally it is sidewise, or has a rolling, mill kind of motion, as in oxen and sheep. In the beaver family it is the motion we give to a rasp or a file when we are using it. The muscles attaching and working the jaws have to be fixed in different positions, according as the above movements are required.



THE AMERICAN BEAVER.

A good deal has yet to be written about the tails of animals. Undoubtedly the old notion that the beaver used its horizontally-flattened tail, (denuded of hair like that of a rat), as a sort of trowel, is not true to the extent it was once imagined. But there seems no reason to question that the tail is used to give the last finishing stroke to the mud which plasters over the erection of twigs and stones and mud which build up the walls of its lodge or hut.

The beavers prove themselves to be aquatic engineers most in the way in which they construct the dam or weir across the streams they frequent. During the summer even the American beavers lead solitary lives—we see nothing of dam-building or hut-making at that time. But just before the leaves begin to fall is their "busy time." These animals then collect in numbers, and combine to form their winter colony of huts. These are of various sizes, according to the number of tenants they are to house. The smallest and simplest are six or seven feet high, round in plan, and about three feet in diameter. Such a one would hold from three to five tenants. Others are larger, and are in fact a sort of beaver barracks. If possible all have dykes or moats running round them, filled with water; for beavers are poor travellers on land, and always prefer taking to the water if possible. The huts or barracks are double-roomed, the upper being dry, and the lower communicating with the water both by the means of admission and exit. The walls of the house are built first of boughs and twigs, filled in with pebbles, and compacted with mud. They are so strong that the powerful claws of the wolverine (one of the beaver's sworn foes) cannot tear them down. As soon as an enemy attacks the dwelling, the inmates quietly retreat by their aquatic chamber, and so escape. Not unfrequently as many as two or three hundred beavers will associate in one colony, so that the river banks form a lively scene. These all combine to construct the dam which arrests the flow of the river or stream. If the current of this be slow and weak, the dam thrown across will be carried in a straight line. Here it is that the engineering instincts of the beaver are most remarkably exhibited. A straight dam is the weakest, from a mechanical point of view, and this kind is only used in shallow or weak currents, where no other kind is required. But in rivers where the currents are powerful, such an obstacle would be carried away immediately. Under such circumstances, therefore, we find the beaver erecting one of a bow-shape, with the convex side towards the current. This is the strongest plan that could be devised, and little or no additional materials are required. The beavers are not only well aware of this, but we find that the corner curvature of their dam varies in proportion to the strength of the current it is opposed to.

In the construction of this dam, also, considerable engineering instinct is shown. The reader has seen a sea-wall, thickest at the base and thinnest at the top. This is the principle adopted by beavers. The thickness of the dam varies from a diameter of twelve feet at the bottom to two feet at the top. It is first all planned with rough logs, then come boughs of trees, stones, and mud. The latter is carried in the forepaws of the animals, handfuls at a time. Their industry is truly marvellous; and the work, although done entirely by night, increases with a rapidity which seems quite to have astonished all actual observers. In order to cut down the numerous trees and boughs to be used in these architectural and engineering operations, the chisel-shaped teeth are brought into use. The beaver sits on its hindquarters, and gnaws at the tree at the level of its own head. It gnaws the trunk all round, much after the fashion with which a woodcutter hacks at a tree he wishes to fell. Like the woodcutter, also, the beaver works most on the side it wishes the tree to fall towards. As soon as the tree is down, assistance is rendered by its companions in cutting off the boughs, or in carrying the tree away piecemeal to be used for the engineering purposes above mentioned.

The wonder is to find such ingenuity exercised for so small a purpose. The dams thus erected last for years, and not unfrequently the wood of which they are largely composed sprouts, so that a fringe of living vegetation marks its position. The houses or huts are annually repaired for winter use, so that the principle of economy of labor is also studied by these patient and harmless little animals. One hardly knows which most to admire—the Almighty goodness which works in them and by them, or the perfection in which that wisdom adapts otherwise feebly-organized animals to such special conditions of life!—*Christian Weekly.*

"THERE'S DUST ON YOUR GLASSES."

I don't often put on glasses to examine Katy's work; but one morning not long since I did so upon entering a room she had been sweeping. "Did you forget to open the windows when you swept, Katy?" I enquired; "this room is very dusty." "I think there is dust on your eye glasses, ma'am," she said modestly. And sure enough the eye glasses were at fault, and not Katy. I rubbed them off and everything looked bright and clean, the carpet like new, and Katy's face said,—I'm glad it was the glasses and not me this time. This has taught me a good lesson, I said to myself upon leaving the room, and one I shall remember through life.

That evening Katy came to me with some kitchen trouble. The cook had done so and so, and she had said so and so. When her story was finished, I said smiling: "There is dust on your glasses Katy, rub them off, you will see better." She understood me and left the room.

I told the incident to the children and it is quite common to hear them say to each other, "Oh there's dust on your glasses." Sometimes I am referred to, "Mamma, Harry has dust on his glasses; can't he rub them off."

When I hear a person criticising another, condemning perhaps a course of action he knows nothing about, drawing inferences prejudicial to the person or persons, I think right away "there's dust on your glasses, rub it off." The truth is, everybody wears these very same glasses, only the dust is a little thicker on some than others and needs harder rubbing to get it off.

I said this to John one day, some little matter coming up, that called forth the remark: "There are some people I wish would begin to rub, then," said he. "There is Mr. So and So and Mrs. So and So, they are always ready to pick at some one, to slur, to hint, I don't know, I don't like them." "I think my son John has a wee bit on his glasses just now;" he laughed and asked, "What is a body to do!" "Keep your own well rubbed up, and you will not know whether others need it or not," "I will," he replied. I think as a family we are all profiting by that little incident, and through life will never forget the meaning of—"There is dust on your glasses."

—*Maud Manning, in N. Y. Observer.*

ST GEORGE ON-

SW M Poyer 1878

Temperance Department.

"THE RED, WHITE AND BLUE."

BY THE REV. RICHARD CORELEY.

Your readers are all familiar with the great temperance movement that has been passing across the Continent for a year or more, but perhaps they have not all been familiar with its varying characteristics in different sections. One of the features of the movement is, the many forms it assumes in different localities, suiting itself to local sentiments and conditions. The Howard Crosby "Legion" in New York is very evidently a part of the great army, and a result of the same great impulse.

Another characteristic is the steady movement westward. You could trace it almost as unerringly as the department at Washington traces the storms across the Continent, giving warning in advance of the "probability" of their coming. Any one familiar with the isothermal lines of public sentiment would have gone ahead of this movement and predicted its coming with at least as good a degree of probability as that which attaches to the storm signals from Washington. There was no concert of action between the different men who led in the work. They seem to have come up each by himself, and by a sort of common impulse each took his own line of progress, without consulting together, and almost without knowing of each other's existence. While Murphy was stirring Western Pennsylvania, and then Ohio, Dr. Reynolds, from another standpoint, and partly on a different basis, was stirring Michigan on about the same parallel. This was nearly a year ago. Both men have since been working east of the Mississippi; but the movement did not stop at that line, but crossed over into Missouri and Iowa last summer, into Kansas and Nebraska in the autumn, and now is touching Colorado. By spring it will be in full force on the Pacific Coast. Murphy has just gone West, but the movement that bears his name is five hundred miles ahead of where he has heretofore been.

Another feature of the movement is that it is largely from the ranks of drinking men themselves. Most of the temperance efforts before this have been the attempts of the friends of temperance to reach the drinking classes, or, more commonly, to reach the traffic in liquors and restrict the sale. They have been looked upon, therefore, by both drinkers and sellers as attacks on them, and have been resisted accordingly. This has been one great disadvantage the reform has labored against; that it appealed so largely to those already convinced, while the great mass who needed reforming were out of range and mostly hostile. But this new movement is like an insurrection in the enemy's ranks. It is from within the lines of inebriation themselves. A physician in Maine had drank away his fortune, drank away his practice, and drank away his health. Again and again he had resolved to reform, and again and again he had fallen. He felt that he was a hopeless drunkard, forsaken, almost, of God and man. In this condition he heard of the praying of the women in the crusades. He reasoned, "If God hears them, perhaps he will hear me." He knelt and prayed for strength to overcome. When he arose it seemed as if a new life and a new purpose had come to him which gave him the victory. Without any thought of a wider work he went to his old associates with his story and with his remedy, and thus commenced the "Red Ribbon Movement" of Dr. Reynolds. He appeals at once to drinking men as one from their own ranks. The fact that he can say, "I know how it is myself, boys," is largely the source of his power.

Again, a saloon-keeper is put in jail for being concerned in a drunken brawl. In jail he forms the resolve to reform, "by the help of Almighty God." He begins to work at once among his fellow-prisoners, and persuades them to a like resolve. As soon as he is at liberty he proceeds to a wider work, and the Blue Ribbon Movement" of Murphy is the result. A very singular coincidence is, that scores of true men who have joined them came to a similar resolve to that of these leaders, before they ever heard of Reynolds or Murphy.

This suggests another feature, that this movement is greater and mightier than the instrumentalities on which it seems to depend. Everywhere they find prepared ground. Everywhere there are men waiting for them. Everywhere they find men who have either taken the vows of temperance upon them or else are waiting for their coming in order to do so. Everywhere men come out from the ranks of intemperance at their word as though it were a conspiracy, and their coming was the signal for its development. None have been more astonished than the old temperance workers themselves. They never saw it "after this manner" before. Most of them are constrained to cry out, "It is the Lord's doings," and all of them join the chorus, "It is marvellous in our eyes." Something has been on before preparing the way. The men and the means are not remarkable, but the results are. There have been unseen forces at work preparing the minds of the people.

Another very marked feature is the religious element that everywhere manifests itself. None of these leaders were praying men before, but they all attribute their victory to the help of God, and insist that nothing less can save a drunkard. While, therefore, this movement emphasizes the declaration that it is "unsectarian, unpolitical and non-legal," it also emphasizes the necessity of dependence on God as no other temperance reform has ever done before. Most of the clubs, therefore, though often conducted by men who have not been religious, are opened with religious exercises, and seek the counsel and help of religious men.

The extent of the work may be dimly hinted at by the statement that the "Red Ribbon Clubs" of Michigan alone number nearly a hundred thousand members, some two-thirds of whom were formerly drinking men. The "Women's Christian Temperance Unions" comprise almost an equal number of ladies, who co-operate with the "Red Ribbon Clubs" in all their work. These "clubs" and "unions" are maintained in almost every town and village in the State. They maintain reading rooms, courses of lectures, and often libraries, and meetings for prayer, and "Gospel Temperance Meetings" are carried on in their name. They have thus far kept clear of all political complications, and every attempt to draw them into any political alliance has failed.

What is true of Michigan is true, or is becoming true, of other Western States. Dr. Reynolds is now passing over Illinois, and Murphy, I believe, has gone to the Pacific coast, and others in similar ways are working in the States lying between the Mississippi and the Rocky Mountains. In extent it fully equals the most powerful movement of the past, while in the inroads it has made on the ranks of intemperance no movement since the Washingtonian reform can compare with it. The "red ribbon" of Dr. Reynolds, the "blue ribbon" of Murphy, and the "white ribbon" which the ladies everywhere choose as their badge, form a combination of strength never before realized. The "Red, White and Blue" is the symbol of victory.—*Christian Union.*

WATER DRINKING.

(From Sir William Gull's Testimony before a committee of the House of Lords).

In recommending the free use of water, I suppose you mean good water?

I think society is in a most ignorant way about water. Many people go on to this very day talking about drinking what they call spring water. A friend of mine, while walking with me on the moors in Scotland, exclaimed, "Here is a charming spring." I asked him whether he could tell me what spring water was; he said, "Anybody knows what spring water is, it comes out of the hills." But I said, "How did it get there? It flows down the hills and picks up all the abominations of the moors; then after filtering through so many feet of earth, it is spring water." By this time we ought to have prepared the water for drinking by artificial processes.

Do you think it would be a safe thing for a man to drink an unlimited quantity of London water?

I confess that I do take an unlimited quantity; I am content to take it as my neighbors have it, only that I have it re-filtered.

Chairman: Would it not be better to boil it?

It would be. We digest the insects.

Archbishop of York: In fact, spring water is a very composite substance, is it not?

Yes, it is.

It contains a great deal of carbonic acid which would involve lime, which it might be free lime?

Yes.

And lime might be injurious in rheumatic cases?

The question of water supply to a community is a very great question; I think we ought to have separated the water which we take with our food, from the water we use for washing and other domestic purposes.

There are cases in which distillation would be desirable, I presume?

Most desirable.

Lord Penrhyn: Would it be practicable, in London, to have two separate supplies?

I do not think it would be practicable altogether at present, but the thing would begin in one class and spread slowly to another.

We need not say anything about London water, which notoriously is not pure, but in the case of impure water generally, would your objections to the use of alcohol apply if there were a small admixture of alcohol in that water; would that have the effect of taking away the dangerous properties of the water?

I do not think it would; no doubt alcohol is antiseptic, but I confess that I should be very cautious how I used alcohol as an antiseptic in my drink; but if I thought the water so bad that it needed that admixture, I should abstain from drinking it.

I am taking the mass of people in London as the water is now?

I do not think they want alcohol added; I drink such water every day, and I want nothing added; of course I drink it filtered.

Earl of Onslow: You spoke just now of a person in the upper classes whom you found it very difficult to get to take any alcohol; was that in consequence of the person having taken any pledge to the contrary?

No, not at all; I should like to say that that is quite common; it is a mistake to suppose that cases of abstinence in the upper classes are not very common; I have seen more instances of abstemiousness among the upper classes than in the middle classes, and that is the more striking, seeing the abundance which is within their reach.

Do you think that that arises from their belief as to the value of alcohol, or the example which they are setting to others?

I think it arises from both.

There is a very common experiment which is shown with reference to the effects of alcohol by dropping some upon a piece of raw liver; is that any criterion of what takes place in the human body?

No, it is no criterion as to what takes place; there is much better experience from the daily numerous deaths from liver disease in drunkards. I can mention what I once saw myself in the case of one of Barclay & Perkins' draymen. The case is recorded. The man was admitted into Guy's Hospital with heart disease; I just now said that heart disease may come through drink; he was a very stout man; he died at about a quarter past ten at night, at about this season of the year, and the next day he was so distended with gas in all directions that he was quite a curious sight. Wishing to know what this gas meant, we punctured the skin in many parts, and tested it. It was carburetted hydrogen, and I remember, lighting on his body 15 or 16 gaslights at once. They continued burning until the gas had burnt away.

That has happened in several instances, has it not?

Yes, it has.

Archbishop of York: Was that alcohol unaltered?

That was, no doubt, the carbon and carburetted hydrogen from those carbon compounds which he had been drinking.

He had been drinking, I presume, up to the last moment?

I could not say, but I have no doubt he had a large amount of unconsumed stuff in him.—*From Blue Book.*

A MANIA FOR DRINK.

What one drink may do even to a total abstainer is fearfully illustrated in the following incident, told by the Kansas City, Mo., *Times:*

A singular instance of the power of alcoholic drink was brought publicly to notice yesterday. A young gentleman, a journalist, a capitalist, and a Christian, is the victim of a suddenly-acquired mania which is quite remarkable. He went to visit his former home last summer in Cincinnati. On his way home to Kansas City, he became sick, and in the absence of a doctor went to the steamboat bar and asked for and was given a glass of whiskey. The drink coming upon a system unaccustomed to it created an intoxication, which has been perpetual ever since. It gave the young man such a mania for strong drink that nothing could restrain him in his excesses. There was nothing about his intoxication offensive to those who visited him. On the contrary, his brilliant mind and inexhaustible fund of conversation seemed to be renewed. He knew that he was surrendering himself to drink and its fascinating effects, but paid no attention to the remonstrances of his friends. There was nothing violent in his excesses. He was calm, mild, and genial; but he insisted on drinking when he desired to drink, and he kept on drinking. He had a wife to whom he was devoted; he idolized her and made every provision for her comfort. He was a member of a church and in good standing; a good lawyer, and the chosen leader of the Young Men's Republican Club. He owns a large amount of real estate, and was on the highway to wealth and prosperity. He had never taken a drop of intoxicating liquor in his life before this drink taken on the Ohio steamboat. Yesterday he was taken East by his father and brother, where restraint will be placed upon his actions, in the hope that the brilliant and cultivated mind may be saved from this strange and fatal infatuation.

TEMPERANCE PROGRESS.

The following facts are stated by the *Troy Times* as showing the practical working of the Murphy movement along the line of the Erie Railway, where it seems the interest still continues unabated:

"One of the first converts of Francis Murphy in the southern tier was William H. Maxwell, of the Elmira *Advertiser*. Since his reformation he has lectured almost every night, and has reclaimed over eight thousand drinking men in this region. It was through his efforts that not a drunken man was seen in Hornellsville at the time of this Erie strike. His lectures are the wittiest, most eloquent and effective of any of the Murphy speakers in this part of the State.

"I made $10,000 by rum-selling in five years," said a well-known resident of Schuyler County, a reformed liquor-seller, at a Maxwell meeting a few nights ago. "During the past five months I have returned that and $5,000 besides, to the families of men I knew were wronged by the place I kept. In helping forward the Murphy cause I will use all I have if necessary."

"I have been counsel in twelve murder cases," said ex-Congressman Horace Bemus, of Hornellsville, at a meeting on Thursday night. "In every case rum was at the bottom of the crime. I bought supper for a man to-night who was worth $50,000 eight years ago. His wife was a judge's daughter. She is in a pauper asylum for the insane to-day. Every dollar of the $50,000 went for rum."

BREAK HIM OF IT.—In our homes we are liable to overvalue noisy measures, and overlook more powerful influences which work silently. Some years ago, when I was Principal of the New Jersey Conference Seminary, a gentleman came to place his son in the institution. When he had made his arrangements, and was about to depart, and had got as far as the door, he stopped to make a final remark. Said he, "You will find John truthful, obedient, and affectionate. He is a good boy in general, but (here he assumed a stern look, and spoke in a stern voice) he has one very bad habit. He has learned to smoke, and (more sternly) I want you to break him of it" (looking fiercely at John, to make the tremendous declaration more impressive and overwhelming)—"I want you to break him of it, if you have to break his neck!" And then, taking off his hat, he drew a cigar from the lining, put it in his mouth, and said, "John, go and get me a match." Of course I could only let "expressive silence" signify my sense of the important duty I was expected to undertake; but I inwardly determined that if John's neck was to be broken for following his father's example, the father himself must do the deed. I will not affirm that cases of gross inconsistency like this are numerous; but who will say that they are few? Too often parental precept goes in one direction, and parental example in another. A man of forty years, who prides himself on his strength of character and his intelligence, calls upon his sons of ten or fifteen years to show a degree of wisdom which he himself has not attained, and a degree of self-mastery to which he fails to prove himself equal. He gives a noisy command and adds a noisy threat, and then, by his own conduct, utterly undoes his own attempted good work. The silent power is the greater.—*J. J. Crane, D. D., in S. S. Times.*

WHAT THE WORKINGMAN WANTS.—The effort which is being made to root out the rum-shops will be only a partial one if it does not furnish as a substitute some unobjectionable places of resort and refreshment. The necessity is met in London and Liverpool by "cocoa houses," or "coffee taverns," which in those cities are largely patronized, even though coming into direct competition with the "public houses." In London a company has been organized, under the auspices of which numbers of coffee taverns are now in successful operation. At a recent opening of one at the Seven Dials, which everyone knows to be one of the slums of the metropolis, Tom Hughes explained to the crowd of customers the purpose of the enterprise. It undertakes to furnish to all light, comfort, warmth, food and reading matter, at little cost. Coffee and cocoa are sold at a half-penny a cup, and tea at a penny and two-pence. We are glad to see that the matter is not wholly neglected here in New York. It is proposed to establish on the east side of the city a place of resort very nearly patterned after the London example, and to be known as the "Workingmen's Club." Lectures and concerts enter into the scheme proposed. An institution of this kind, if properly managed, will be of great utility and meet a vital need.—*N. Y. Temperance Advocate.*

Agricultural Department.

HOW TO MAKE HOT-BEDS.

A correspondent of the *Cincinnati Times* says upon the subject:—As it will soon be time to make hot-beds for early cabbage and tomatoes, I will give some of my experience in the last ten years. Any one not experienced might think it a very easy thing to make a hot-bed, but he will find after he has been in the business for years, he will sometimes fail. It requires a great deal more care and attention for early beds than for those later in the season. The first thing is to select a warm, sheltered spot, on the south side of some building, and it should be protected from the cold west winds.

After leveling the ground, haul your fresh horse manure (there should be considerable straw mixed with it), and put in a pile, off to one side, where you want the bed. In hauling be careful to have it well shaken apart, so there will be no lumps in it. After this has lain from one to three days, according to the state of the manure when hauled and the weather, commence and shake the manure evenly over the place prepared for the bed, till the manure is not less than twenty or twenty-four inches thick. It should extend eighteen inches beyond the frame on every side. Before putting on the frame, take a wide board, and begin on one side and go over the bed, laying the board on and pressing down by walking on it. This will keep the surface level. If the weather is cool, the manure should be covered as quickly as possible with earth. Common garden soil will be the best for the first two or three inches on the manure, as it will hold the water better than soil from the woods, but the top should always be light soil from the woods, and rotted logs. It will not pack or bake after watering. The dirt should not be less than seven or eight inches deep; this will give the plants a good bed to make roots before reaching the manure. As soon as the dirt is on and leveled, put your sash on and cover up tight with boards or straw; then bank up your bed to the top of the frame with manure, and let it remain covered up for thirty-six or forty-eight hours. This will give the bed time to cool off from the first heat, and also any weed seed to germinate that may be in the dirt. Before sowing your seed, rake the bed, and pulverize all the clods; then mark out in rows, north and south not less than six inches apart; scatter in about five or six to the inch; water and cover up again, and leave till the plants begin to come up, which will be in from two days to a week, owing to the heat of your bed.

FATTENING DAIRY COWS.

In view of the comparative scarcity and increased demand for fat cattle, the question occurs whether it will not pay dairymen in putting up stock to be turned in good order, instead of selling it at the ruinously low rate that is customary. The plan now followed by dairymen, and which has been in operation for many years, is to sell off in the fall all animals that do not prove profitable for milk. No attention is paid to putting these animals in condition for the shambles. The prices paid for this kind of stock are usually very low, ranging from $8 to $15 per head for animals in ordinary flesh, and $20 to $25 for large-sized cows for the butcher. In years past the poorer specimens of this kind of stock have been slaughtered merely for the rounds and the hide, and the remaining part of the carcass thrown away. Many an animal that in the spring cost the dairyman from $50 to $60, while proving unprofitable for milk has been sold in the fall at from $8 to $10, or for such rates as could be obtained. Now, the cause of these low prices comes from the poor condition of the stock. It is not fit for marketable beef; the farmer thinks it will not pay to winter it, and therefore disposes of it, making a heavy loss between purchase and sale. The general practice, as above described we believe to be all wrong, and that better results would be obtained by putting at least a portion of the animals in fields and fitting them for the shambles. It seems a great waste to kill an animal poor in flesh. If dairymen would engage more generally in growing roots, turnips and mangolds, the animals could be fattened without any great outlay for meal, and a considerable profit would be obtained from this branch of the business, instead of the loss which is now made. Much of this stock is yielding little or no milk by October. If they were at once dried off and fed a little meal with pumpkins, turnips and other available food from the farm, the animals would be in good order by December, and could be sold at satisfactory prices. And this would be especially the case with young, thrifty stock which have not proved profitable in milk. There are many accidents that occur in the dairy, such as defective udders, the loss of teats, the failing to come in calf, which render it desirable to turn animals that are young and thrifty and which would take on flesh rapidly with a little extra feeding. It is poor economy to sell stock in the fall, when it is out of condition, because it will not bring anything like its real value.

FARMERS AS VETERINARY SURGEONS.

With very few exceptions, farmers are poor veterinary surgeons. In fact, in the majority of cases they do more harm than good in their attempt to combat disease. Their treatment not being according to any system, there being an almost complete ignorance of disease and drugs, *in any and every disease*, they try every remedy they or their neighbors can procure, in hopes of at last getting the right one. So we see that usually the animal has a more severe trial to survive the remedies than to survive the disease. Usually, they will first say the animal has horn-ail; no matter what the disease, horn-ail is thought of first. For horn-ail their treatment is to take a gimlet and bore a hole in the horn, near the head; then they take a wire and push it into the cavity of the horn and poke it around, not minding the struggles of the tortured animal. Perhaps, after this operation, they don't feel satisfied that it is horn-ail (by the way *there is no such disease*), but *feel sure that it is* connected with the head. Well—they argue that the tail is connected with the head, and any operation on the tail is as good as a similar one on the head, so the next thing is to take a knife and split the tail from one to three inches. This is a cruel piece of business, from which no good can result, at any rate, not enough to compensate for the harm done. If it is necessary to bleed, there are much better ways, and no one who is not a veterinary surgeon should attempt it. In fact, it is almost never desirable to bleed in any disease. Without a doubt, it would be well to bleed in a few rare cases, but usually the desired effect can be brought about by some milder treatment. Doubtless there is too much prejudice against bleeding at the present day, and probably physicians will (in a measure) gradually resume this method of treatment in a few years; yet my advice to farmers is—"never bleed, in the treatment of your cattle." Another remedy, much used, should be done away with. It is the practice of injecting with a syringe large quantities of a mixture of water, salt, vinegar and strong pepper, into the nose to "start the nose." This could not be so severely censured if it was only used where it might possibly do good, but the trouble is, they will do it in almost every case of sickness. Then, how often, when everything else has been tried, the whip-handle is thrust into the mouth to push imaginary obstacles down the "gullet." It rarely goes where it is intended—fully as likely to go down the windpipe. Thus we see in the majority of cases the animal is much better off with no treatment, for the usual reckless, haphazard course would tend to produce death more quickly than most diseases. Remember that most diseases will cure themselves if let alone—or more properly, nature in most cases will throw off the disease. If you wish to do anything, give a laxative which can do no harm, and in most cases will do good. If there is indigestion, charcoal, salt, etc., are good. By the way, charcoal will cure almost all the slight sicknesses which hogs have. Powder it and put it in their swill. With educated physicians, hygiene and diet are taking the place, in a great measure, of large quantities of disagreeable drugs.—*By Flavel S. Thomas, M. D., F. M. M. S., in Rural New Yorker.*

WHEN TO PRUNE FRUIT TREES.

Long experience shows that when it is desirable to produce a free growth of shoots and leaves, pruning should be done when the trees are dormant, as in the winter season, or early in the spring, before the sap begins to flow. When fruit trees appear to grow too rapidly, and to produce too much wood, they may be pruned moderately in the summer season, cutting away a portion of the wood by degrees, but a shoot growing in an improper place may be cut away at any time. An experiment made by pruning apple trees every month in the year, for two seasons, showed that the wounds of the branches cut in February and March, at the end of five years, when all had healed over, were found to be the least decayed under the healed surface. When trees are pruned in winter, or I may say at any time, it is best to cover the wounds with a hot mixture of tar, and pulverized brick dust or fine sand. A solution of shellac in alcohol, as thick as can be applied with a brush, is considered by many as the best preparation that can be applied.

During the mild days of winter, orchards may be pruned—while little else can be done; but good judgment should be exercised in regard to selecting the branches to be cut away. It is ruinous to an orchard to cut and slash away one-third to one-half the limbs. All that should be done is to give the trees a good shape, and only cut away such limbs as are plainly in excess of the natural requirements of the tree to conform to the extent of its roots. If we take away too much of the top of a tree, it is like taking blood from a man—the more that is taken, the less vitality remains in him, therefore in pruning, only the few unsightly branches, and those improperly situated, should be cut away.—*Rural New Yorker.*

WHITEWASHING.

The whitewash process is in order this month and next, for fowl houses and fences—inside and out. The common method of half cleansing the poultry premises, has been in vogue so many years, and farmers are so prone to adhere to the old furrow in doing these things, that they need to be reminded every spring and fall that complete cleanliness of fowl-houses and runs is essential to success. In whitewashing the interior of a poultry house do not leave a spot even as large as the head of a pin untouched anywhere. Plash the whitewash liberally into every nook and corner, crack and crevice. If the hennery has a floor of cement, stone, brick or boards, whitewash that also.

The plan of "whitewashing" is a very good and serviceable way to renovate the houses, and to purify the premises. But the use of lime alone in this work, is not so good a method as the following:

Into the whitewash pail, when the liquid is prepared for application to inside work, while the lime water is still hot, drop a tea-cup full of soft boiled rice, and mix it thoroughly through the mass. Then pour into a quart pot of cold water, say ten or twelve drops of crude carbolic acid. Mix this into the rest, and swab the interior of your hen house with it.

For outside work, use rock-salt dissolved instead of boiled rice, and dispense with carbolic acid. No other preparation of "whitewashing" ever equalled this, within our knowledge—and no one who tries this once, will ever be content with any other combination, for poultry buildings.—*The Poultry World.*

Be Liberal to Your Farms.—Be liberal to your farms, and they will be liberal to you. A farm is very much in one respect like a looking-glass—it reflects the character of the owner exactly. If he is parsimonious his farm will show it. If he is a man of taste, his buildings, fences, and general arrangement of his farm will tell the tale. No effort on his part to disguise his real thoughts or sentiments will avail anything so long as the operations of his farm belie his words. The farmer who invests freely in his farm is sure to be paid well for his risk and trouble. Liberality in providing utensils, says the *Western Rural*, is the saving of both time and labor. The more perfect the farmer's tools, the more profitable are they. So, also, it is with his working cattle and his stock. The most perfect in their kinds are most profitable. Liberality in good barns and warm shelters is the source of health, strength and comfort to animals, causes them to thrive on less food, and secures from damage all sorts of crops. Liberality also in the provision of food for domestic animals is the source of flesh, is muscle and manure. Liberality to the earth, in seed, culture and compost, is the source of its beauty.—*Our American Farmers.*

General Hints About Hives.—No one should attempt to keep bees in any but a movable frame hive. The time to make bee-keeping successful and profitable in the old log and box *gums is gone*. They afford too many hiding-places for the moth and its progeny or worms, and make it too difficult—indeed, next to an impossibility—to extricate them. A good plain movable frame hive, well painted, will last a life-time. Common sense will teach any one that where a bee can enter a moth can enter. The secret of success in bringing out moths is to keep your colonies dry and strong, in a close, well-made hive, and they will attend to that part of the business themselves. The bee-keeper is rich in proportion to the strength of his colonies, and not the number of his hives. If one wishes bees to do well, by all means keep the hives full and strong. It is very important that every hive, of whatever kind, should be provided with a large ventilator, directly, under the combs, covered with wire-cloth, with a slide so arranged that it may be opened as little or much as may be desired.

DOMESTIC.

A HOME MADE COOK-BOOK.

"When a young girl at home I had done considerable pastry-cooking, canned fruits, made pickles, etc., and thought I knew all about housekeeping. But ah me! when I married I found that in many things I was as ignorant as is my little daughter now. But determining to conquer and become a successful housekeeper and home-maker, and believing that regular and well-prepared meals were essential to this end, I eagerly sought information from every available source. Looking back on those days I laugh at my youthful experience, but then it was oftener a cause for tears than laughter. I searched every cook-book I could find, and in all I saw much that was useful, but also much utterly valueless. Then I hit upon a plan of making one of my own, and now, after sixteen years, I would advise all young housekeepers to try the experiment.

"Purchase a blank book with pages all numbered, but put nothing in it save what you have tried or seen tried. Arrange it systematically; divide into different departments, one for meats, another for vegetables, for bread, pies, puddings, etc., allowing space at the end of every section in the body of the book and in the index in which to make entries, as new receipts or directions are found, tried and approved. Any good housekeeper will be glad to furnish you her rules for her own favorite dishes. Write all out definitely, remembering that it is equally important that the ingredients be properly mixed and cooked as that the proper proportions are used.

"In such a book, prepared by your own hand, and each thing tested by you, there is a feeling of reliability which makes it invaluable. What a treasure such a book would be to a daughter, all written by a mother's hand and tested by her judgment and mature wisdom!"—*Correspondent Christian Union.*

To Clean Feathers.—Cover the feathers with a paste made of pipe clay and water, rubbing them one way only. When quite dry, shake off all the powder and curl with a knife. Grebe feathers may be washed with white soap in soft water.

—The proper soil for the calla lily is richest loam and peat, well mixed. When growing, you cannot give the plants too much water. In the window, if the plants are set in a saucer kept constantly filled with water they will be the better for it. In summer the plant will grow well and flower profusely out of doors, in a tank.

Gloss for Shirt Bosoms.—A laundress gives the following recipe for doing up shirt bosoms: Take two ounces of fine white gum arabic powder, put it into a pitcher, and pour on a pint or more of water, and then, having covered it, let it stand all night. In the morning pour it carefully from the dregs into a clean bottle, cork it, and keep it for use. A teaspoonful in a pint of starch made in the usual manner will also give to lawns, either white or pink, a look of newness, when nothing else can restore them after they have been washed.

To Wash Lace.—Roll the lace carefully on a round bottle—a long Cologne bottle is good for this purpose. See that the edging is wound on the bottle very evenly, and none of the purl edging turned in. Have a wash-bowl of warm soap-suds (white soap) ready, and lay the bottle or bottles in it. Have them abundantly covered with the suds. If a fair day, set the bowl in the sun, and let the lace soak several hours. Then rinse through several waters to cleanse from all soap. Blue the last rinsing water slightly, and put in enough gum arabic water to stiffen, no more than new lace, then hang the bottle in the sun to dry. When thoroughly dry, unwrap it from the bottle, and folding it very evenly, lay it in a clean handkerchief or soft towel, and put a heavy weight on it for an hour or two. Never iron lace.

A Clean Floor.—The other day I went to see my friend, Mrs. Cook. She had just finished mopping up her kitchen floor. I noticed it looked very nice and asked how she kept it so well. "Why," she said, "Don't you know I oil it about every six months? That is what makes it so easily kept clean." "Oil!" I said, how do you know that? So then she told me as follows: I take a quantity of the cheapest and least offensive oil (linseed) I can secure, and I apply it with a common paint brush. I put it on smoothly, so that it will strike equally all over, and yet not stand in spots on the surface. I do this at night after the evening work is done and find the place ready for use again next morning. Of course it would not injure the oiled surface itself to tread upon it at once, but grease is liable to be tracked from it, at first, to adjacent parts of the house. A new coat of oil applied once in six months, or even once a year sometimes, is sufficient to keep the floor in perfect order. One may in this way prepare to great advantage the floors of kitchens, pantries, summer dining-rooms, back-rooms, back-halls, stairways, porticoes, closets, bath-rooms and laborers' bedrooms.—*The Household.*

RAG AND TAG.

BY MRS. EDMUND WHITTAKER,

(Author of "Hilda and Hildebrand," "The Return from India," "Little Nellie," &c.)

CHAPTER II.—*Continued.*

"We must find anotherer sleeping place, Rag; the prison wouldn't suit us by no means; to be locked up an' never get out, like a lark in a wire cage, would be awful! To-night we must make the best on it; to-morrer we'll find a betterer place."

"Where the 'dreadful ones' ill niver find us, Tag. They'd kill us now outright; oh, won't they be fur'os when they find their shawl and jacket gone—an' ain't I glad we tuk 'em! Oh, Tag, me an' my lill' l'elfent is so tired; s'pose we creep in there," and she pointed to a barrel placed on its side against the wall of a large warehouse; "there's lots o'room for us both; let's find a stone to keep it from rolling, an' then get inside; we shall be warm an' snug there." Accordingly into the barrel they crept, and slept soundly until morning.

Tag was the first to awake. He did not like to move, for Rag was lying sound asleep beside him; and if he stirred much, there was danger of the barrel rolling over, so he lay very still whilst he ran over in his mind the possibilities and probabilities of making a livelihood. If it was not for my lill' Rag I'd get on somehow or other; but gels is softer than boys, an' I promised to take care on her. S'posin' I wake her, an' we go on our ways afore we're disturbed here, or s'posin' I creeps out werry, werry gently an' goes an' takes a look around."

Very, very gently he got out, shook himself, rubbed his cropped hair backwards and forwards many times with both his hands, but no thoughts favorable to their future would come into his head; and fearing Rag might awake if he went away, and lose herself trying to find him, he sat down at the mouth of the barrel, with his feet inside and his hands encircling his knees.

Rag did sleep soundly; excitement and pain had worn her out, and Tag began to fear she might never wake again. Presently the clock of a large church close by struck seven, and Tag knew that soon people would begin passing to and fro.

"Hi! lill' Rag!" and he pushed her gently with his foot. "Hi, lill' 'un, it's time as we wor off; we must be up an' about our new dooties: no more 'dreadful ones' for us. We'll be 'dreadful ones' now, won't we?" And he laughed quite a hearty little laugh.

"Dearsie, dearsie," yawned Rag, as she crept out of the barrel; "but that wor a real nice bed; I wor comfor'ble just. S'posin' it's here to-night, we'll use it agin."

"I can't exac'ly say yes to that, Rag; we dunno where we shall be to-night; p'raps quite at t'other side from 'ere. Let's go now; or stay, we'll sit still one minit longer. No 'un cares for us as passes by, an' we'll just finish our piece of loaf. Somehow I don't want to change our large shillin,' Rag, until we're quite set fast, or until we can spend it in somethin' as will make somethin' again. What d'ye think is our best plan?—'ere's a bit o'bread for you, an' a bit for me. What would yer like best to do—keep another shop, sell hot taters, black boots, sweep crossin's, beg, or——"

"Stealin's least trouble, Tag; beggin' an' stealin' pays best. The family next cellar to the 'dreadfuls' made heaps that way. The gel with the long nose used often to mock at me as I sat at the board, an' would show me lots o' coppers she got for nothin'."

"Stealin's good fun, an' all werry well if yer not cotched; but 'member, Rag, the long-nosed 'un was 'ad in prisin, and you wouldn't like that."

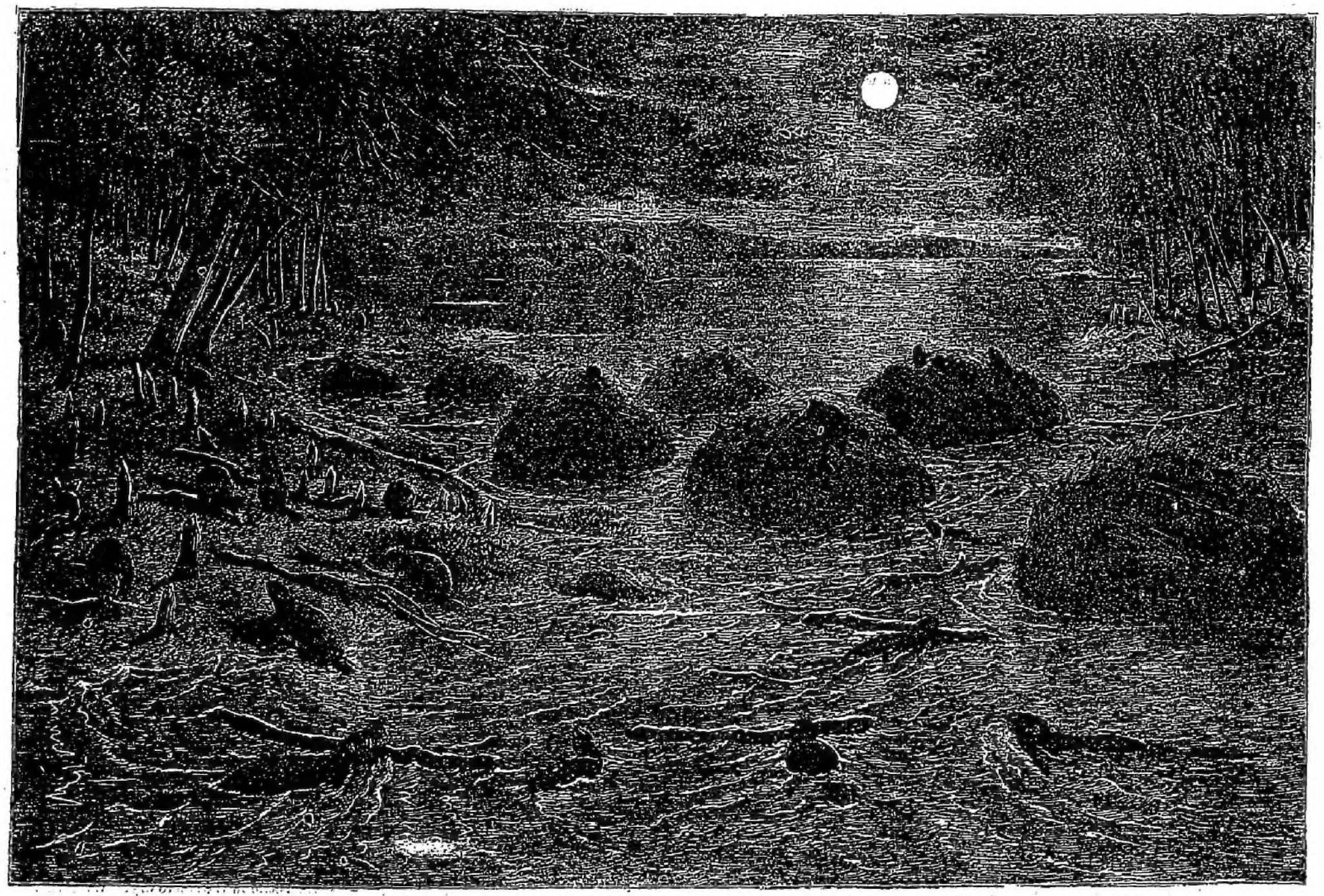
"Could'n we get out 'o prisin any ways, Tag, you an' I, s'posin' we got in?"

"No ways, Rag; they'd keep us as tight as if some un wor to come an' put the end on o' this barril and nail it up tight, an' you an' me inside a-sleepin' sound. No, never let us go for to get into prisin; you'd not like it, Rag, I can tell yer."

"Prison!" said a stern voice behind them; "yes, I'll send you to prison, and quickly too if I catch you meddling with my goods. What mischief have you been up to with this barrel?"

Rag and Tag sprang to their feet, and turning round to see where the voice came from, saw the large warehouse door had been quietly opened, and a great, tall, strong-looking man stood there; but although his voice was gruff, his face was far from unkindly, and there was quite a gentle look in his eyes as he stood with his coat off, and his arms folded beneath the great apron he had on.

"D'ye hear me, children?" he continued; "what have you been doing to this barrel?—



A COLONY OF BEAVERS BUILDING THEIR HUTS.

quick now, tell me, and tell the truth."

"We wor doin' nothin' to the barrel, please sir;" and Rag made a sort of funny jerk, which she meant for a polite curtsey.

"It wor the barril as did somethin' to us, sir;" and Tag smiled brightly, for he was sharp and quick enough to see at once the man was good-natured.

"Why, what did it do to you, you young scapegrace?"

"It sarved for our lodgin' last night, sir, an' we'd a' been off this mornin' afore you com'd an' found us, only lill' Rag 'ere slept so sound like, I didn't like to wake her."

"Humph," said the man, turning the barrel round a little—"just what I thought; one of my best barrels, too; nice for the next sugar! Tell me, my lad, why did you come here instead of going home?"

"We ain't got no 'ome anywheres."

"No father or mother?"

"No, sir."

"Don't you remember ever having any?"

"Yes—long, long ago."

"Where are they, then?"

"They're both on 'em dead. Father killed 'isself with drinkin' gin, an' mother died of her needle an' thread, an' nothin' to eat."

"Then why aren't you dead, too?"

"'Cos nothin' will kill us," said Rag, gravely. "We've been betted an' betted—look at my soldgers now—an' starved an' starved, an' all sorts o' thin's; but we allus lived through it all. I wor kilt last night for a bit after my soldgers had got it werry bad; but I com'd alive agin, an' I'm all right now, an' we're a-goin' to make our livin,' Tag and I."

"Was this done to her shoulders last night?" asked the man, looking at Tag, as he drew the old red shawl on one side; they were swollen and striped black and blue.

Tag nodded.

An expression of pain passed over the man's face as he asked—"Was that why you ran away?"

Tag nodded again.

"Speak up, my boy, don't nod; you could speak well enough just now."

"It's them soldgers as does for me," answered Tag, passionately. "I see'd your face when you saw 'em, an' I can't abear to look on 'em 'ither. I promised mother to take care o' lill' Rag, but I couldn't keep that off her;" and the poor, ragged, dirty boy leant against the wall and cried bitterly.

"He niver does like that in ginral," said Rag in surprise. "All the time I've know'd him I never see'd 'im like this afore; an' they've bet 'im and bet 'im, but he niver guv in like that—it's all along o' sleepin' in the barril; it wor so comfor'ble like, and p'raps 'e's thinkin' we shan't get it to-night. Don't 'e mind, Tag dear, don't 'e mind; my soldgers are ever so well now, an' it's time for us to go and 'arn somethin'."

"You want to earn something, do you? But stealing and begging isn't proper earning. Ah, you need not look red, my girl. I heard what you were saying to him a little time ago, and I heard what he said."

Rag looked inclined to run away, but the man laid his hand on hers and the other on Tag, and said, "Come with me a moment."

"Oh! oh!" and Rag almost screamed in her alarm. "Yer not for givin' us back to 'the dreadfuls.' Oh, don't 'e guv us back; we'll do anythin' you like—run messages, tidy up, clean winders, anythin' you tell us, we'll do; only don't guv us back—they'd kill me for ever this time, an' I'd niver come 'live no more; an' Tag he'd get dead too, and——"

"He'll not guv us back, Rag, no fear—I knows 'im; but we must get forrard now," and Tag tried to get away.

"You think you know me, my boy; but you don't if you imagine I'm going to let you off in this way."

Tag now began to look almost as much alarmed as Rag. "Let us go, sir, let us go, do now; we only want to live respec'ble an' try an' make our livin'."

"Is that really true, my boy? I mean is that really what you wish—to try and be respectable, and make a living for your sister and yourself?"

"Tis indeed, sir, reely, reely true—only we don't quite know how to begin." And Tag looked with all his eyes straight into the eyes of the man, who was evidently taking an interest in him.

"Well, now, supposing I take you two to-day into the warehouse and give you something to do, will you do it?"

"Try us, sir, only try us!" exclaimed both the children at once.

"Yes, I'll try you; but mind, disappoint me and off you go."

"What are we to do, please, sir?" asked Rag.

"First of all get clean, and then I will tell you. Wash your hands and faces at this pump, and dry them with this," throwing them a large piece of sacking, "and then come to me—I shall be in that little inner room."

Very soon the children appeared, their faces and hands certainly the better for their acquaintance with the pump; but two more wretched, pitiful-looking little objects the man thought he had never seen.

"Now then, boy, what's your name?"

"Tag, sir."

"Well, Tag, look here—this is your work, follow me;" and Tag followed him, accompanied by Rag, into a large long room, well lit up by gas, which made it nice and warm, entirely filled with boxes of different sizes, some empty, some full, but none too heavy for the boy to lift. "I want you to sort all these boxes, and arrange them on the shelves according to their sizes—the smaller at the top, the larger at the bottom; empty ones on this side of the room, full ones on that. Here are a pair of steps for you to stand on, and in a couple of hours' time I'll come back and see how you are managing; the little girl can help you, or I can give her something to do in another room."

"I'd rather stay an' help Tag, please, sir."

"Very well; but look here, mind you don't stir either one or the other from this room until I come for you. You would not like to be caught by your late friends again, and more than likely they are on the look-out for you. Now be good children, and see how tidy and neat you can make this place look before I return. I tell you what, I'll just turn the key on you, and then you will be quite safe."

"Sir, sir!" exclaimed poor little Rag in terror; "yer not goin' for to lock us up for ever, like prisin."

"'Rag' is what Tag calls you, is it not?"

"Yes, sir."

"Well, Rag, my girl, look into my face, and tell me if I look like a man who would be unkind to you, strap your shoulders, or lock you up in prison? No; it's to save you from prison, and try and do you good, that I am keeping you here—not to harm you. Can't you believe me, little Rag?"

Rag looked up sharply in his face for a moment; then, as if perfectly satisfied, she turned away.

"Yes, I b'lieve yer; lock us up, or anythin' yer like."

The tall, strong warehouseman looked down on the two children, and with a muttered "Poor, poor little things," left the room, turning the key in the door as he shut it.

"Come, Rag, this 'ere's jolly. I like it a deal betterer than sellin' off the board. We'll soon get this place tidied up, an' then p'raps he'll give us somethin' more to do to-morrer; an' in time we'll make our fortins."

"It wor a good thin' we crept into the barril, worn't it, Tag?"

"Niver mind talkin,' Rag, just now; let's get these boxes up."

In about an hour's time the children stopped to admire their work and take breath.

"Oh! but it's bootiful—so tidy and nice; it's fit for the Queen to come and dine in now, ain't it, Tag?"

"Well, it do look nice. S'posin' we sit down on this box for a lill' bit an' talk."

"Yes, let's. I say, Tag, why do all of us say it's fit for the Queen when a thin' is werry partickler nice?"

"'Cos she's so werry partickler nice herself—I s'pose that's the reason."

"Would she be angry with the 'dreadfuls' if she knew of our soldgers?'

"I should think as she would be—werry partickler angry."

"Where do she live, Tag?"

"Oh, in a good many places; ev'rythin' down 'ere belongs to her."

"What does she do all day long?"

"Sits in a boot'iful large chair, with a crown a' gold atop 'o 'er 'ead, an' smiles iver so sweet."

"But you niver see'd her, Tag?"

"No, but I've see'd her picter many an' many a time in the gran' shop-winders; an' she's bootiful, an' that's what she does."

"I'd rather, arter all, Tag, be adoin' of these boxes than sit like that a-smilin' all day long; it must be werry tirin' for her."

"Oh, not so werry. Give me that box, Rag; we must get on with our work. It's not like doin' it for the 'dreadfuls.' He looked so kind at us, I could work all day for him, and such as him."

(To be Continued.)

The Family Circle.

MAGIC CURTAINS.

I know of some curtains, all lined with pink silk,
And bordered with fringes of gold,
That, fashioned of satin, the hue of rich milk,
Are made to fold and unfold.

When darkness comes on, and the world sinks to sleep.
These beautiful curtains slip down;
And, all through the night-hours, caressingly sweep
The cheeks of all sleepers in town.

And when the day dawns, and the people wake up—
These curtains, they fold up so tight—
Their creamy-white fulness so closely take up,
That only the fringe is in sight!

Do you know what these wonderful curtains are yet?
Or, will you be filled with surprise,
When I tell you that two are most cunningly set
Right over your wondering eyes?
—*Wide Awake.*

A TEST OF OBEDIENCE.

AN ILLUSTRATION OF EDEN.

One Sunday evening, Charlie and Georgie Russell were talking together as they were lying in bed side by side. Their mother had been telling them of the beautiful garden of Eden, where Adam and Eve lived so happily; of Eve's sin in being tempted by the serpent, and in persuading Adam also to disobey and eat of the fruit of the tree which God had forbidden them to touch. Now the little boys were talking over their Scripture lesson in their own childish way.

"What a beautiful place it must have been!" said George; "and what a pity it was that Eve took the fruit; but for that we might perhaps have lived in the garden too."

"I know that I would not have touched that one tree when there were so many other kinds of fruit I might have," said Charles. "I cannot think how Eve could have been so foolish; it would have been quite easy not to go near the tree at all, and then she would not have tasted the fruit."

And so the children talked on, until at last Eve and her sin were forgotten in sleep.

Mrs. Russell heard the boys' conversation through the half-opened door which led into her own room, and she smiled at Charlie's positive way of speaking, for she knew what the little boy did not—how difficult it is to resist temptation unless we trust in God's strength instead of our own.

Before the end of that week, Charles and Georgie came to their mother one very wet day, with tired, gloomy faces. It was a half-holiday, and they "wanted something to do;" all the toys had been turned out, but they had tired of all. "Would mamma lend them some books from the glass case in the parlor?"

Mrs. Russell readily granted this request on condition that they sat quietly down to read and did not tear the books, putting them carefully away when they had finished reading; and as the little boys had been often allowed this pleasure, and were usually careful, their mother at once unlocked the bookcase, telling them to choose whatever they liked best: "You may have any books you like excepting those on the top shelf—I cannot allow those to be touched." And then Mrs. Russell went away, and the boys sat down on some low stools by the fire, each with an interesting book.

An hour went by, or perhaps more, and not a sound was heard but the rustling of the pages as the little boys turned them over; but soon after Georgie began to fidget, and presently he closed his book, put it in its place on the shelves, and looked for something else.

But after taking down two or three volumes, he did not find anything that much pleased him, or that he had not read before, so he got upon a chair and began reading the names which were printed on the backs of the books.

All at once his eyes wandered to the top shelf. Why! what pretty looking books, red and green, and all manner of bright bindings: they looked just the books which children like to have.

"Charlie," said Georgie—but his brother did not hear until he had been called several times and then he lifted up his head and asked what was the matter.

"Why do you think mamma told us not to touch this one row of books?" asked George.

"Oh, I suppose they are only fit for older people," answered Charlie, and down went his head again, as he stooped over his book.

"But do come and see," persisted Georgie; 'they are all in pretty colored bindings just like our favorite books; now papa's books are generally ugly-looking ones—do look, Charlie."

So at last Charlie came and stood up by his brother, and looked along the forbidden row.

"Why, if there isn't old 'Robinson Crusoe,'" he exclaimed: "how I should like to see that, Georgie—it is such a fine book—all about Robinson being cast on a desert island, and his man Friday, and lots of other things. I have a great mind to get it down, for I am sure mamma could not mean that we were not to have that."

"But she said *none* of the books on that shelf," said Georgie, hesitatingly.

"Yes, I know that, but she could not have known that 'Robinson Crusoe' was up there. Wait a bit—the question is how to reach it." And Charlie looked round the room to see what he could find high enough.

"I know," said he at length—"we must push the table close to the book-case. There, so. Now I'll put a chair on the table and hold it while you reach down the book, Georgie."

"Oh, no, I can't," said the little boy, timidly; "I know I should fall."

"Oh you little coward!" exclaimed Charles; "you're just like a girl. Well, then, you hold the legs of the chair and I'll get it myself.

So Charlie clambered on the table and got on the chair, while Georgie stood looking rather frightened lest his brother should fall.

"All right," said Charlie, as with the book in his hand he turned to come down. How it was I cannot say—whether his foot slippes, or whether Georgie did not hold the chair steadily, but just as Charlie was about to step from it on to the table he and the chair came down upon the floor with a crash which was heard throughout the house. Georgie screamed, and the servant ran up from the kitchen to see what had happened just as Charlie scrambled upon his feet—not much hurt, fortunately, beyond being somewhat shaken and bruised.

Of course the maid did not know how naughty they had been, so she seemed very sorry, and was asking Charlie if he was quite sure he was not hurt, when at that moment Mrs. Russell's voice was heard. She came at once to the parlor to see how her boys were amusing themselves, and there was no need for the explanation which the servant was about to give.

The table pushed back from its place, the chair still lying where it had fallen, the shamefaced looks of the two boys—all told the tale of disobedience, even if Charlie had not held the "Robinson Crusoe" tightly in his hand, and even if there had not been that gap in the upper row of books which showed so plainly from whence it had been taken. You may suppose that Mrs. Russell was much grieved to find that her little boys did not deserve the trust she had placed in them, and you will not wonder that she felt it right to punish them by sending them at once to their bedroom, and by forbidding them to have books from the parlor shelves for a whole month.

Before the little boys slept that night, and when they appeared really sorry for acting so disobediently, their mother talked to them of the sin they had committed, not only against herself, but against God, who has said, "Children, obey your parents in all things."

"And now, Charlie," she said, "can you understand a little better how Eve was tempted to disobey, and by so doing was driven from the beautiful garden?"

Charlie blushed, for all at once he remembered the Scripture lesson of the last Sunday evening, and his own assertion that *he* would not have touched the forbidden fruit had he been in Eve's place. "I did not know why you told us not to touch those books, mamma," he said.

"No, Charlie, neither did Eve know exactly why she might not touch that one particular tree; I heard what you said last Sunday evening, and as it is well we should all know how easily we may fall into sin, I resolved to try if you and Georgie would be as strong in resisting temptation as you supposed. The books on the upper shelf are all very interesting, but it was not safe for you to attempt to climb so high, therefore I forbade you to get them."

"But could not we have those books on a lower shelf?" asked little Georgie.

"Yes," said Mrs. Russell; "but that was the plan I made to see if my wish was sufficient to make you obey me."

"How I wish we had not touched the book!" said Georgie to his brother, when they were alone. "I am afraid I tempted you, Charlie."

"No," said Charlie; "you asked me to look, but it was I who was determined to get the book down; oh dear, I was just like Eve, and yet I thought her so foolish!"

But the little boys did not forget that lesson they had learnt of their own helplessness against temptation, and they began to understand that it is only by God's help that we can be kept from falling into sin.

Let us hope that they, and all who read this little tale, will pray in the words our Saviour taught us, "Lead us not into temptation."—*Children's Friend.*

THE LEGEND OF ST. CHRISTOPHER.

Once upon a time, as the dear old fairy tales tell us, there dwelt in the land of Canaan the giant Offero. A great and brave giant was he, well versed in the art of war; and, in his prowess with the bow and spear, he was surpassed by no other giant of the land.

The services of this mighty warrior were enlisted in the cause of the greatest of all earth's kings. Now Offero was a pagan, for he dwelt in a land where the people had never heard of the great and loving Saviour. Yet sometimes he would see his master pause and bend the knee, and a great tremor would shake the kingly frame, as he seemed to quake for fear of some powerful spirit.

And Offero said unto his master: "Wherefore is my lord afraid? Who in heaven and earth is greater than he? The monarch I serve must not bow the knee to other monarch; tell me, then, the name and kingdom of this mightier lord than thou that I may search him out and serve him!"

And the king replied, "His name is Satan; an unquestionable and all-powerful sway holds he over the hearts of men; and I shudder when I see him, for often I feel him very near."

The giant traversed many a burning desert before he found the object of his search, and then prostrating himself before the arch-fiend, "Thou art my king and my lord," cried he; "the giant Offero acknowledges none but thee as his master; and he will follow thee whithersoever thou leadest!"

"Aye, then, rise!" and the wily tempter raised him to his feet; "thou art fairly welcome, for I have need of warriors such as thou."

Together they travelled far and wide; to the ends of the earth it seemed to Offero. He saw towers and temples, beautiful cities ready and almost crying out for conquests, riches and luxury such as he never dreamed of. At last they came to an ancient city and stopped by the side of a little pool, on whose brink stood a cross, with a figure in wood carved thereon. Even the bold, fearless Satan did not dare to drink from the pure fountain.

"Hast thou never heard of him?" whispered the Devil, pointing to the figure on the cross. "Him alone do I fear, for He is the Maker of heaven and earth, the Creator and Lord of all. Such love and pity does God bear for men, that He sent His well-beloved Son to die for them that they might be saved unto immortality."

"Much as I have loved thy service, I leave thy ranks to find this holy One," said the giant.

After weary and unsuccessful search for his Lord, Offero met in the desert a holy man, a hermit, who told him of the Saviour, and of his love toward men."

"Aye," said Offero, "but how may I serve him?"

"Thou knowest the mighty and fast flowing river? Go, dwell on its banks, and tender thy stalwart help to the timid pilgrims who fear to cross its black waters."

So Offero found the river, and built himself a hut of branches on its shore; and many a tired and discouraged traveller did he bear in safety to the opposite banks.

One night there arose a terrible storm. The lightnings flashed, thunder pealed, and the angry wind almost tore in pieces the frail hut of the giant. Offero was roused from his evening devotions by a cry for help from without. He grasped his trusty palm staff and strode out into the night, but, so black was the darkness, he could see nothing.

Again he heard the pitiful cry. "I am weary, ah, so weary, with the fight! Good Offero, come, and bear me over in your arms!"

A flash of lightning showed the giant a child wrestling with the angry waters. "Courage, little one," cried he, "I am coming." And he raised the tiny form in his arms, and braced his giant strength against the powerful current. But the darkness seemed to grow more black; the howling wind raised the waters in great rolling waves; and his burden seemed to have grown, oh, so much heavier. Yet he struggled bravely onward until at last he reached the other side.

"Who is it I have carried, thou little one, that hast so tried my strength?"

The child looking up, answered, "'Tis the Lord who died for thee, faithful Offero. Long hast thou desired to prove thy love, and to-night know thou hast borne me, and I bless thee with my love."

Then the raging winds were silenced, and the happy giant heard a voice both soft and low, saying, "He who bore the Saviour must be called Christ-Offero."

But the angel-child had vanished, and the giant was as before alone by the river's side.

So runs the legend.—*Churchman.*

"SOMEBODY LOVES ME."

THE POWER OF LOVE.

Two or three years ago, the superintendent of the Little Wanderers' Home, in——, received one morning a request from the judge that he would come up to the court-house. He complied directly, and found there a group of seven little girls, dirty, ragged, and forlorn beyond what even he was accustomed to see. The judge, pointing to them, utterly friendless and homeless, said—

"Mr. T——, can you take any of them?"

"Certainly, I can take them all," was the prompt reply.

"Ah! What in the world can you do with them?"

"I'll make women of them."

The judge singled out one, even worse in appearance than the rest, and asked again.

"I'll make a woman of her," Mr. T——replied, firmly and hopefully.

They were washed, and supplied with good suppers and beds. The next morning they went into the school-room with the children. Mary was the little girl whose chance for better things the judge thought small. During the forenoon the teacher said to Mr. T——in reference to her—

"I never saw a child like that. I have tried for an hour to get a smile, but failed."

Mr. T——said afterwards himself that her face was the saddest he had ever seen, sorrowful beyond expression; yet she was a very little girl, only five or six years old.

After school he called her into his office, and said pleasantly—

"Mary, I've lost my little pet. I used to have a little girl that would wait on me, and would sit on my knee, and I loved her much. A kind gentleman and lady have adopted her, and I would like for you to take her place, and be my pet now. Will you?"

A gleam of light flitted over the poor child's face as she began to understand him. He gave her a penny, and told her she might go to a shop and get some candy. While she was out he took two or three newspapers, tore them into pieces, and scattered them about the room. When she returned, in a few minutes, he said to her—

"Mary, will you clear up my office a little for me? Pick up those papers, and make it look nice."

She went to work with a will. A little more of this sort of management—in fact, treating her as a kind father would—wrought the desired result. She went into the school-room after dinner with so changed a look and bearing that the teacher was astonished. The child's face was absolutely radiant; and, half fearful of mental wandering, he went to her, and said—

"Mary, what is it? What makes you look so happy?"

"Oh, I have got some one to love me—somebody to love me!" the child answered earnestly, as if it were heaven come down to earth.

That was all the secret. For want of love that little one's life had been so cold and desolate that she had lost childhood's beautiful faith and hope. She could not at first believe in the reality of kindness or joy for her. It was the certainty that some one loved her and desired her affection that lighted the child's soul, and gladdened her face.

Shall we, who have many to love, and who love us, refuse to be comforted, to see any value and use in life, any work for our hands to do, because one of our treasures may be removed from our sight, from our home and care, to a better?—*Word and Work.*

"UNCLE TOM."

(Concluded.)

Once determined to escape, it did not take one with as fertile an invention as Josiah Henson very long to arrange a plan. It was some time after his arrangements were completed before he could bring his wife to decide to fly with him, and it was not until he threatened to run away with all their children but the youngest, that she consented to accompany him. His chief difficulty, then, was his two youngest children, aged three and two years, respectively, and he had arranged a large knapsack of tow-cloth, large enough to hold them both, and attached to his shoulders by strong straps which went round them. In this he night after night carried the children, both to test his own strength and accustom them to this mode of conveyance.

It was a dark, moonless, Saturday night in

the middle of September that the now fugitive party got into a little skiff and was rowed across the river, running by their master's estate, by a fellow slave. In the middle of the stream the boatman said: "It will be the end of me if this is ever found out; but you won't be brought back alive, Sie, will you?" "Not if I can help it," replied Josiah, and he thought of the pistols and knife he had bought some time before from a poor white. "And if they're too many for you, and you get seized, you'll never tell my part in this business?" "Not if I'm shot through like a sieve." "That's all," again said the boatman, "and God help you." The latter subsequently escaped to the land of freedom and the two have often talked over the conversation of that dark night on the river.

For a fortnight the fugitives pressed on their journey, keeping to the road during the night; hiding whenever a chance vehicle or horseman was heard, and during the day burying themselves in the woods. Their provisions were rapidly giving out, and two days before the party reached Cincinnati there was nothing left. All night the children cried with hunger, the father was weary and his back and shoulders raw with the burden he had been carrying. A sense of insecurity and a fear of detection ever followed him, and in the night he would start out of his sleep in terror, imagining that the dogs and slave hunters were upon him. But something must be done or they all would starve almost within sight of liberty. He resolved to sally boldly out and seek for provisions. The first house he reached he was told, "No! I have nothing for niggers!" At the second the man of the house met him in the same style, but the wife overhearing the conversation, said, "How can you treat any human being so? If a dog was hungry I would give him something to eat; we have children, and who knows but they may some day need the help of a friend." She then loaded a plate with venison and bread, put it into the handkerchief of the needy one, and he hurried away to his starving wife and little ones. Two days after they were all in Cincinnati.

In Cincinnati Henson was comparatively at home. Those who had before befriended him now again administered to the comfort of the fugitive party, carefully providing for their welfare until their strength was recruited, and then sent them on thirty miles by waggon. They followed on in the manner they were now well accustomed to—travelling by night and resting by day—till they arrived at Scioto, when they struck the military road of General Hull, made in the last war with Great Britain, along which they were informed they might safely travel by day. They had not been told, however, that the road was cut through a wilderness and that it was necessary for them to carry food for the whole length of their journey, and they carried none. They travelled all day in hopes of seeing some hospitable habitation where food might be obtained, but were disappointed. In the morning they divided a small piece of dried beef, too little to satisfy their hunger, amongst them and renewed their journey. Suddenly, as they were plodding along, the father, who was a little way ahead of the rest of the party with his two babes on his back, heard himself called. Turning around he saw his wife prostrate on the ground. "Mother's dying" cried one of the boys, and it seemed as if such were the case. From sheer exhaustion she had fallen in surmounting a log. After some minutes she recovered and was enabled slowly to pursue her journey. But starvation stared them in the face and hope began to die away into despair. But the lesson learnt by very many was again to be taught here, that "man's extremity is God's opportunity."

About three o'clock in the afternoon a party were seen approaching at no great distance. They could not be friends, it was thought, and the fugitives kept themselves on the alert. In a moment the strangers had advanced so that it was seen they were Indians with packs on their shoulders. If they were unfriendly it was useless to attempt to escape, and Josiah walked boldly to meet them. Their eyes had been bent to the ground till now, and raising them they looked at him in a frightened sort of way for a moment, and then setting up a peculiar howl, turned round and ran away as fast as they could. This was a matter of surprise to the others, who could not imagine the cause of this perceptible fright. But Josiah followed them and on going nearer with his companions discovered the Indians peeping at them from behind the trees and dodging out of sight when the negroes looked at them. Presently the party came upon the wigwams and saw a fine-looking stately Indian, with his arms folded waiting for them to approach. He was the chief, and saluting them civilly discovered they were human beings, and speaking to his young men who were scattered about, made them come in and give up their foolish fears. Their fears were turned into curiosity. Everyone wanted to touch the negro children, and the latter, who were as shy as partridges from their long night journeys in the woods, would jump back when touched, and the Indians would jump back also as if they were about to be bitten. But soon the Indians were made to understand the wants of the fugitives and they were bountifully supplied and a comfortable wigwam given them for their night's rest. The hospitality continued after the night, for some of the young men were sent to point out the place they were to turn off, and parted with them with as much kindness as possible.

The next day they came within sight of Sandusky City, on Lake Erie. About a mile from the lake Josiah hid his wife and children in the bushes, and pushed forward to a small building from which a number of men were engaged in loading a vessel. They turned out to be friendly. He explained his case and they agreed to carry him as far as Buffalo, cautioning him to remain hid till dark, as there were a lot of "iregular nigger-catchers" in the village below. It was decided that when the vessel was laden and had got off it should heave to near where the party were hid, when a boat would be sent off to them.

The subject of this sketch thus describes his last hours as a slave, and his first minutes as a freeman:—

"I watched the vessel with intense interest as she left her mooring. Away she went before the free breeze. Already she seemed beyond the spot at which the captain agreed to lay to, and still she flew along. My heart sank within me; so near deliverance, and again to have my hopes blasted, again to be cast on my own resources! I felt that they had been making sport of my misery. The sun had sunk to rest, and the purple and gold of the west were fading away into grey. Suddenly, however, as I gazed with a weary heart, the vessel swung round into the wind, the sails flapped, and she stood motionless. A moment more and a boat was lowered from her stern, and with a steady stroke made for the point at which I stood. I felt that my hour of release had come. On she came, and in ten minutes she rode up handsomely on to the beach.

"My black friend and two sailors jumped out, and we started off at once for my wife and children. To my horror, they were gone from the place where I left them. Overpowered with fear, I supposed they had been found and carried off. There was no time to lose, and the men told me I would have to go alone. Just at the point of despair, however, I stumbled on one of the children. My wife, it seemed, alarmed at my long absence, had given up all for lost, and supposed I had fallen into the hands of the enemy. When she heard my voice, mingled with those of the others, she thought my captors were leading me back to make me discover my family, and in the extremity of her terror she had tried to hide herself. I had hard work to satisfy her. Our long habits of concealment and anxiety had rendered her suspicious of every one; and her agitation was so great that for a time she was incapable of understanding what I said, and went on in a sort of paroxysm of distress and fear. This, however, was soon over, and the kindness of my companions did much to facilitate the matter.

"And now we were off for the boat. It required little time to embark our baggage—one convenience, at least, of having nothing. The men bent their backs with a will, and headed steadily for a light hung from the vessel's mast. I was praising God in my soul. Three hearty cheers welcomed us as we reached the schooner, and never till my dying day shall I forget the shout of the captain—he was a Scotchman—'Coom up on deck, and clop your wings and craw like a rooster; you're a free nigger as sure as you're a live mon.' Round went the vessel, the wind plunged into her sails as though inoculated with the common feeling—the water seethed and hissed past her sides. Man and nature, and, more than all, I felt the God of man and nature, who breathes love into the heart and maketh the winds His ministers, were with us. My happiness that night rose at times to positive pain. Unnerved by so sudden a change from destitution and danger to such kindness and blessed security, I wept like a child.

"The next evening we reached Buffalo, but it was too late to cross the river that night. 'You see those trees,' said the noble-hearted captain, next morning, pointing to a group in the distance; 'they grow on free soil, and as soon as your feet touch that, you're a mon. I want to see you go and be a freeman. I'm poor myself, and have nothing to give you; I only sail the boat for wages; but I'll see you across. Here, Green' said he to a ferryman, 'what will you take this man and his family over for—he's got no money?' 'Three shillings.' He then took a dollar out of his pocket and gave it to me. Never shall I forget the spirit in which he spoke. He put his hand on my head and said, 'Be a good fellow, won't you?' I felt streams of emotion running down in electric courses from head to foot. 'Yes,' said I: 'I'll use my freedom well; I'll give my soul to God.' He stood waving his hat as we pushed off for the opposite shore. God bless him! God bless him eternally! Amen!

"It was the 28th of October, 1830, in the morning, when my feet first touched the Canada shore. I threw myself on the ground, rolled in the sand, seized handfuls of it and kissed them, and danced around, till, in the eyes of several who were present, I passed for a madman. 'He's some crazy fellow,' said a Colonel Warren, who happened to be there. 'Oh no, master! don't you know? I'm free!' He burst into a shout of laughter. 'Well, I never knew freedom make a man roll in the sand in such a fashion.' Still I could not control myself. I hugged and kissed my wife and children, and, until the first exuberant burst of feeling was over, went on as before."

Here we will leave him, simply remarking that most of the time since he has lived in the Township of Down; that he several times crossed the Atlantic and received Royal notice in England, and that at the present time he resides in Dresden, Ontario, a hale old man of eighty-nine years, and, as regards the things of this world, lives in comfort and opulence.

WONDERFUL LETTERS.

Is there anything in the world more wonderful than a letter? When the English missionaries first went to Africa, nothing surprised the black people more than the letters they wrote. "Does the person you write to hear you speak?" said a chief to one of the missionaries. "No." "Does he see your lips move?" "No." Then he ranged a long line of his people in a field, asked the missionary to stand at one end, and stood with a second at the other end. "Now write what I bid you." The missionary beside him put down the chief's words, and the bit of paper was passed on by a messenger to the other end. At that end the missionary standing there read the words to the messenger. The messenger repeated them to the chief, and the chief cried out, "It is just magic!"

And a letter is really a kind of magic. It is only a sheet of paper with some signs on it. But it tells what is going on ten, twenty, a hundred, or a thousand miles away. Through these signs, we, sitting at our breakfast tables, can see homes over wide seas, and the people living in them, and baptisms, and marriages, and sick-beds and funerals. By these signs commands come from far countries, and merchants in this land rise and go to the market, or the exchange, or the bookstore, or the house of a neighbor, and do the biddings of those who wrote them down. And by these signs the secrets of one heart are carried into another; and two hearts know the secrets instead of one.

What Paul says in one of his letters is, that Christian people are, in the same wonderful way, letters of Christ. Christ tells the secrets of his heart by means of them and they carry his commands. And those who meet with his people and come to know them learn the secrets of the heart of Christ, and what is taking place in Christ's home in the heaven.

Christ has always been a letter writer. He has written his letters on the blue sky and on the green earth. Summer and winter, springtime and harvest are sentences from one of his letters. He wrote ten words once, thousands of years ago, on sheets of stone at Mount Sinai, and those words are read still in every part of the earth. He has written two long letters to men in the Bible: the one is called the Old Testament, the other the New Testament, and those letters have been copied thousands of times and are being sent to and fro among all the nations of mankind.

But from the beginning He said: "It is not enough for me that I write on the sky and the field, or on leaves of stone, or paper. I want something better still to write my letter on. I will only be satisfied when men allow me to write my letters on their hearts; and when I can lay my heart with all its secrets on the hearts of men and women and boys and girls, and leave the imprint of these secrets there."

So Paul gives the name to the boys and girls, and the men and women who have let Christ write the secrets of his heart on theirs. He calls them epistles of Christ—letters written on the fleshy leaves of the heart. And there is nothing better in the world for a boy or girl than to be a letter of this kind for Christ.

Two or three years ago the people living in Paris were surrounded by the German army, and could neither get out themselves nor have anybody come in. They were besieged by that army, and all the while the siege lasted neither bread, nor milk, nor coals, nor wood, nor horse, nor cow could get in. It was a hard time, and the people suffered from want of food. But there was another thing they greatly suffered for want of—and that was news of dear ones in other parts of the world. At last those dear ones wrote letters on the first page of the *Times* newspaper in London. Then a photographer made a copy of that first page so small that it was only the size of a penny stamp. Then those tiny pages were tied under the wings of doves, and carried by them over the heads of the German army into Paris. There the photographers made the tiny papers large again. And in this way the people in Paris got letters from the dear ones far away.

The Lord Jesus does something like this in writing His letters on young hearts. He has a great deal to say: but the hearts of children are too small to receive all his words. So the Lord makes His letter small, so small that it can all be printed on a child's heart. And then as years go on and the body grows tall, the heart grows larger and larger, and the letters grow with the growth of the heart, and when boys and girls come to be young men and women they find that the loving Jesus has written nearly all the Bible on their hearts.

But sometimes it is only a single sentence He writes. During a very cold winter, between twenty and thirty years ago, there were two stories in the newspapers which went to every heart. A poor actor left Inverness for the town of Cromarty, where he was engaged to play. He had his little girl with him, a child of seven or eight. Snow had already begun to fall when he set out. But by-and-by a storm arose, and the snow fell so thickly that all the sky became dark with it, and the poor travellers lost their way. In a day or two, half way to Cromarty, at a lonely turn of the road, where there was some shelter, the two were found buried in the snow, and dead. But it was noticed that the child was wrapped round with the father's overcoat, which he had taken from himself to keep her warm.

The cold was so great that year that many poor people died of it in their very houses, where they had neither fire nor food. Among those who died was a lonely mother in one of our cities. She was found cold dead on the floor of her home, and nearly naked, but beside her was her living child, living and warm, well wrapped up in the clothes which the mother had taken from her own body.

What were those two: the poor actor who stripped himself of his coat to keep warm his child: the poor mother who went nearly naked to keep her baby alive? They were letters written by Christ and sent out to be read of all, letters written with one of the deepest secrets of His heart. What He wrote on those two hearts was sacrifice, pity, love, like God's. Just as those two acted. Christ would have acted if He had been in their places. It was even so He did act, when on the cross He died for man. He took His own life and wrapped us round with it, that we might not die but live. And He would have every one of us to act to others as He acted towards us. And on our hearts, as on the hearts of those two of whom I have told, He desires to write pity and self-sacrifice, and kindness and love.—*Sunday Magazine.*

WORDS OF THE WISE.

Don't be ashamed to wear old garments until new ones can be paid for.

Don't be ashamed to speak a kind word to the poor and outcast, even if you are frowned upon by the fastidious.

It is pride that fills the world with so much harshness and severity. We are as rigorous to offenders as if we had never offended.

The surest way of being deceived is to think yourself cleverer and more cunning than anybody else.—*Rochfoucauld.*

It is a duty that grown-up people owe to the rising generation, to hold it in proper subjection. It is an American weakness to permit boys to have their own way at home, at school, and abroad. The result is too apparent everywhere. The prisoners of jails and penitentiaries are of a younger age year by year. Boy-thieves, burglars, and robbers are becoming an acknowledged part of the criminal class.—*N. Y. School Journal.*

Among the forms of insect life there is a little creature known to naturalists, which can gather around itself a sufficiency of atmospheric air, and, so clothed, descend into the bottom of a pool; and you may see the little diver moving about dry and at his ease, protected by his crystal vesture, though the water all around him be stagnant and bitter. Prayer is such a protector, a transparent vesture—the world sees it not; a real defence—it keeps out the world. By means of it the believer can gather so much of heavenly atmosphere around him, and with it descend into the putrid depths of this contaminating world, that for a season no evil will touch him, and he knows when to ascend for a fresh supply. Communion with God kept Daniel pure in Babylon.—*Dr. James Hamilton.*

Where your treasure is,
there will your heart be also.

MATT. 6: 21.

SCHOLARS' NOTES.

(From the International Lessons for 1877, by Edwin W. Rice, as issued by American Sunday-School Union.)

LESSON VII.

FEBRUARY 17.]

JOASH REPAIRING THE TEMPLE. [About 856 B. C.].

READ 2 Chron. 24: 4-13. RECITE vs. 8-10.

DAILY READINGS.—*M.*—2 Chron. 24: 4-13. *T.*—2 Kings 12: 4-14. *W.*—Ex. 30: 11-16. *Th.*—Hosea 2: 16-23. *F.*—2 Cor. 8: 1-15. *Sa.*—Matt. 19: 20-30. *S.*—1 Cor. 3: 9-17.

GOLDEN TEXT.—Joash was minded to repair the house of the Lord.—2 Chron. 24: 4.

CENTRAL TRUTH.—All should give cheerfully to the Lord's work.

CONNECTED HISTORY.—After Jehoshaphat's victory over the Moabites, his son Jehoram shared the rule with him for two or three years; Jehoshaphat died; Jehoram ruled alone about six years; murdered all his brothers; fought the Edomites; restored idolatry; was reproved by Elijah; attacked by the Philistines and Arabians; died of an incurable disease, 2 Chron. 21: 18, 19. Ahaziah, his youngest son, next reigned one year, and was slain by Jehu. His mother, Athaliah, a daughter of Ahab and Jezebel, was the queen for six years; was slain by order of Jehoiada the priest. Joash became king at the age of seven, and reigned forty years.

NOTES ON PERSONS.—*Jo'-ash*, 8th king of Judah; son of Ahaziah; ruled forty years (878-839 B.C.). When Queen Athaliah slew the royal children, Joash was saved by his aunt; hid for six years; made king in his 7th; ruled well while Jehoiada the priest lived (about twenty-five years); was slain by his own servants. See 2 Chron. 22: 10-12; 2 Kings 11, 12. *Je-hoi'-a-da*, a high priest; married Jehosheba, who hid Joash; ordered Athaliah to be slain; had Joash made king; aided him in restoring true worship; died at an old age. *Ath-a-li'-ah*, daughter of Ahab and Jezebel, wife of Jehoram, king of Judah (who is to be carefully distinguished from Jehoram, king of Israel, about the same time); destroyed the royal family except Joash; ruled six years (884-878); was slain by order of Jehoiada the priest.

EXPLANATIONS AND QUESTIONS.

LESSON TOPICS.—(I.) THE COLLECTION ORDERED. (II.) THE MONEY GATHERED. (III.) THE TEMPLE REPAIRED.

I. THE COLLECTION ORDERED. (4.) WAS MINDED, desired, wished; TO REPAIR, or "to renew," for in the reigns of Jehoram and Athaliah the temple had been partially destroyed and its worship neglected for that of Baal. (5.) PRIESTS . . . LEVITES, they had charge of the temple-worship, 1 Kings 8: 10, 11; GATHER OF ALL ISRAEL MONEY, a similar collection was made for the tabernacle, Ex. 35: 5, 21-29; 36: 6; HASTEN NOT, probably because they had no heart for the work. (6.) JEHOIADA, the chief priest, see *Notes*; THE COLLECTION . . . OF MOSES, Ex. 30: 12-15; THE TABERNACLE OF WITNESS, Num. 1: 50. (7.) SONS OF ATHALIAH, Ahaziah and his brothers: DEDICATED THINGS, holy things, see 2 Kings 12: 4; BAALIM, plural of Baal, the sun-god.

I. QUESTIONS.—Who ruled with Jehoshaphat? How long? How long was he king alone? Character of his reign? Who succeeded him? Length of his reign? By whom slain? Name of the queen succeeding him? Length of her reign? By whose order slain? Why? Who was made king in her place? How long did he reign? What did he wish to do? v. 4. Who were brought together? What was the king's order to them? Why did they not hasten? For whom did the king send? What did he ask Jehoiada? What was the collection of Moses? How much was each man to give? State the value of a half shekel. Who had broken up the temple? What had become of the holy things in it?

II. THE MONEY GATHERED. (8.) MADE A CHEST, 2 Kings 12: 9. (9.) MADE A PROCLAMATION, literally "made a voice," sent a herald through Judah. (10.) PRINCES, princes were chief court-officers; MADE AN END, had given enough, or had given all they could. (11.) KING'S SCRIBE, or secretary; HIGH PRIEST'S OFFICER, either his servant or deputy; MONEY IN ABUNDANCE when all gave, there was abundance for the work.

II. QUESTIONS.—What did the king order made? Where set? What to be announced? What collection of Moses is meant? In what spirit did the people give? Who had charge of the chest? How much money was gathered?

III. THE TEMPLE REPAIRED. (12.) TO MEND THE HOUSE, to repair or renew the house. (13.) WORK WAS PERFECTED, was finished; IN HIS STATE, as it was at first, or its proper condition.

III. QUESTIONS.—To whom was the money given? For what? How done? By what two facts is this proved?

What facts in this lesson teach us—

(1.) That we are to sustain the public worship of God?

(2.) That we should persuade others to aid us in it?

(3.) That all should give cheerfully to the Lord's work?

GIVING

STATED PORTIONS,
REGULARLY,
LIBERALLY,
CHEERFULLY,
} BY ALL,
GATHERS
ABUNDANCE FOR GOD'S WORK.

ILLUSTRATIONS.—Worship or praise is the rent we owe to God; and the larger the favor, the greater the rent. God's house is always to be cared for and kept in order; the reverence of a community may well be judged of by the condition and appearance of the church where they worship.

LESSON VIII.

FEBRUARY 24.]

UZZIAH'S PRIDE PUNISHED. [About 766 B. C.]

READ 2 Chron. 26: 16-23. RECITE vs. 19-20.

DAILY READINGS.—*M.*—2 Chron. 26: 16-23. *T.*—2 Chron. 26: 1-15. *W.*—Num. 18: 1-7. *Th.*—Num. 12: 3-15. *F.*—2 Kings 5: 20-27. *Sa.*—Dan. 4: 28-37. *S.*—Psalm 51.

GOLDEN TEXT.—Pride goeth before destruction, and a haughty spirit before a fall.—Prov. 16: 18.

CENTRAL TRUTH.—The Lord resisteth proud worshippers.

CONNECTED HISTORY.—Joash ruled about 15 years after the death of Jehoiada the priest; was slain by his servants; his son Amaziah reigned 29 years; defeated the Edomites; Amaziah was treacherously slain at Lachish; his son Uzziah (or Azariah) succeeded him, and ruled 52 years. During this period Jehoahaz, Jehoash, Jeroboam II., Zachariah, Shallum, and Menahem were kings of Israel.

TO THE SCHOLAR.—We are not to worship the Lord in our way, but in his way. Even our worship in the house of God, when it is contrary to God's command, will bring us no blessing.

NOTES.—*Uz-zi'-ah* (also called Azariah), 2 Kings 14: 21; son of Amaziah; made king of Judah at 16; reigned 52 years (810-758 B. C.); he defeated the Philistines; fortified his kingdom; sinned by usurping the priest's office; was punished by leprosy. The prophets Hosea, Joel, Amos, and Isaiah lived in his reign. *Az-a-ri'-ah*, a high priest who reproved Uzziah. *Lep'-ro-sy*, a terrible and loathsome disease. See Lev. 13: 14. Six remarkable cases noted in the Old Testament: Moses, Ex. 4: 6; Miriam, Num. 12: 10. Naaman, 2 Kings 5: 1; Gehazi, 2 Kings 5: 27; four lepers of Samaria, 2 Kings 7: 3, and Uzziah; 13 cases of it are noted in the New Testament. The disease was a type of sin. *Jo'-tham*, son of Uzziah; ruled while his father was a leper, and succeeded him; reigned 16 years (758-742 B. C.). *I-sa'-iah*, (*I-za'-yah*), great prophet, son of Amoz; lived in the reigns of Uzziah, Jotham, Ahaz, and Hezekiah (765-698 B. C.). Tradition says he was slain by being sawn asunder by order of Manasseh.

EXPLANATIONS AND QUESTIONS.

LESSON TOPICS.—(I.) UZZIAH'S PROFANE OFFERING. (II.) UZZIAH'S LEPROSY.

I. UZZIAH'S PROFANE OFFERING. (16.) WAS STRONG, by victories, armies, and help of the Lord, see v. 15; HEART WAS LIFTED UP, grew vain and proud, Prov. 16: 18; BURN INCENSE, lawful only for priests, Num. 16: 40. (17.) AZARIAH, an high priest, with 80 others, would hinder the king from burning incense. (18.) WITHSTOOD, to oppose; IT APPERTAINETH NOT, it belongeth not, is not proper; SONS OF AARON, who alone could be made priests; CONSECRATED, set apart for a holy work; TRESPASSED, sinned.

QUESTIONS.—Give the title of the last lesson. Who was king after Joash? For how long? How did he die? Who was the next king? How long did Uzziah reign? Give the title of this lesson. The Golden Text. Central Truth. Name the kings of Israel during the reigns of Joash, Amaziah, and Uzziah in Judah. Who helped Uzziah? v. 5. How? v. 15. The effect on Uzziah's heart? v. 16. For what did he go into the temple? Who followed him? How many were with Azariah? What did they do to the king? What say to him? Who alone had a right to burn incense? Who were slain in the wilderness for a similar sin? Num. 16: 5, 31, 32. What order did the priest give the king?

II. UZZIAH'S LEPROSY. (19.) WAS WROTH, Josephus adds, "threatened to kill them;" HAD A CENSER, which only a priest should have; LEPROSY, see Notes; ROSE UP, broke out. (20.) THRUST HIM OUT, a leper polluted the temple; HIMSELF HASTED, the sudden disease made him realize his awful sin. (21.) SEVERAL HOUSE, a free or separate house, possibly a public hospital. Josephus says: "A terrible earthquake took place in Jerusalem at this time." See Amos 1: 1; Zech. 14: 5; JOTHAM . . . JUDGING, ruling for his father, 2 Kings 15: 5. (22.) DID ISAIAH . . . WRITE, see 2 Kings 15: 6. This history by Isaiah is probably lost. (23.) BURIAL WHICH BELONGED TO THE KINGS, being a leper, he was buried, not in the tombs of the kings, but near them.

II. QUESTIONS.—How did Uzziah receive the reproof of the priest? What was in his hand? While he was angry what happened to him? Where was he standing? Who looked upon him? What did they see in his forehead? What did they do to the king? What did he himself do? Why? How long was he a leper? Where did he dwell? What is the meaning of "several house"? Who ruled over the people for him? Who wrote a history of his reign? What has probably become of it? Where was Uzziah buried? Why not in the tombs of the kings?

What facts in this lesson teach us—

(1.) The danger of prosperity?

(2.) How God regards his service?

(3.) That he will punish those who defile his sanctuary?

ILLUSTRATION.—*Pride.*

He that is proud eats himself up. Pride is
His own glass, his own trumpet, his own chronicle;
And whatever praises itself but in
The deed, devours the deed in praise.—*Shakespeare.*

See also parable of the Pharisee and the publican. Luke 18: 9-14.

THE *NORTHERN MESSENGER* ATTACKED.

SIR,—I suppose you recollect that I sent you a letter about a club for the NORTHERN MESSENGER. The club is broken up, owing to an article that appeared in the *Canada Presbyterian* denouncing the NORTHERN MESSENGER as a Sunday-school paper. It is a great disappointment to me not to get the skates which you promised, but it will have to be. J. M.

Waterloo, Jan. 4, 1878.

REMARKS.

The course of the *Presbyterian* in this matter has been unkind. It published an offensive and damaging attack on the MESSENGER at the instance of a young minister, to whom we give the utmost credit for conscientiousness, falsely accusing the publishers of the MESSENGER of very contemptible conduct towards himself, and declaring the MESSENGER unfit for circulation through Sabbath-schools because it contained other than Sunday reading. We did not imagine we had anything to do in reply to this thrust below the belt at the very season when all our subscriptions were coming in but to write to the *Presbyterian* a polite reply to the misrepresentations it had given space to, but were disappointed to find that in place of a generous desire to mend an injury done, there was inserted only a travesty of our answer. Our statements that the most experienced promoters of Sabbath-school work throughout the country had eagerly forwarded the circulation of the MESSENGER as being the very thing the country needed, and that about 25,000 copies of it were now taken through Sabbath-schools were entirely ignored. It is somewhat singular that the *Presbyterian* itself, which its friends look upon doubtless as a religious paper, has just the same departments of science and household economy and of advertisements, &c., that the MESSENGER has. The fact is the MESSENGER is intended to supply all the reading of many of the families it goes into, and we believe a considerable proportion of the fifty thousand families it enters are largely dependent on it for instruction, both temporal and spiritual. The whole accusation appears to us like tithing mint and anise and cummin and forgetting the weightier claims of justice and mercy.

EPPS'S COCOA—GRATEFUL AND COMFORTING.—"By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition, and by a careful application of the fine properties of well-selected cocoa, Mr. Epps has provided our breakfast tables with a delicately flavored beverage which may save us many heavy doctors' bills. It is by the judicious use of such articles of diet that a constitution may be gradually built up until strong enough to resist every tendency to disease. Hundreds of subtle maladies are floating around us ready to attack wherever there is a weak point. We may escape many a fatal shaft by keeping ourselves well fortified with pure blood and a properly nourished frame."—*Civil Service Gazette.*—Sold only in Packets labelled—"JAMES EPPS & Co., Homœopathic Chemists, London, Eng.

CAMPAIGN NOTES.

THE MESSENGER is doing better than ever this year. Nearly every club is renewing, the very best evidence of its usefulness and applicability for the work it sets itself out to perform. Now that the snow has fallen and the winter roads have been pretty generally opened there will be greater ease in getting to the front than before. Will our workers take advantage of it to do something for the MESSENGER. We would not like to drop a name on the list, and would be very much pleased to welcome thousands of new friends.

The work for our prizes is rapidly progressing all over the country, and the latter are giving the greatest satisfaction. The following are a few of the letters received concerning them:—

"I now return many thanks for the present which I received from you. I received the ring last Tuesday, and I am surprised to see it is what it is. I honestly did not think that it would be gold, but it is solid gold. I cannot thank you enough for it. I am trying to get up another club, and will get as many subscribers as I can, anyhow, and send them to you.

H. J., Heckston, O.

SHILOH, January 8th, 1878.

I received the fine album you sent me, safe and sound. It was far better than I expected; you have laid me under great obligations to you. I shall try and get you some more new subscribers. S. S.

EAST DURHAM.

You will please accept my thanks for the fine album you so kindly sent me. I gave it to mother for a New Year's present, and she prizes it highly.—F. L. B.

MONCTON, Dec. 25th, 1877.

I beg to acknowledge the receipt of the skates, which came duly to hand by mail. They exactly suit me. I am very much pleased with them. I feel that I am amply repaid for the little trouble I took in getting subscribers for the MESSENGER, and if spared another year will renew my efforts in getting names to your publications.—D. J. M.

BLUE MOUNTAINS, N.S., Dec. 25th, 1877.

I received the skates last night, and I was well pleased with them. I think they are well worth working for. They are the best I ever saw. I think any one who sets their minds on getting a pair of skates may get them, if they will only try, and not be contented with trying only once, but try, try again, and then they will succeed.—A. McD.

HOLSTEN, January 4th, 1878.

* * * I hope you have received my letter of thanks for the skates, for they are a splendid pair. The weather is freezing now, and I am having a fine time skating. One of the boys I was skating with lately, admired my skates so much that he offered me $3.00 for them, but I would not part with them.—G. M.

ELGIN, O.

Your prize ring came promptly to hand, and I was surprised when I opened the case, to find such a beautiful ring. It suits splendid, both in size and appearance. I am trying for another of your prizes, and hope to be successful.—S. A. S.

The prizes are as follows:—

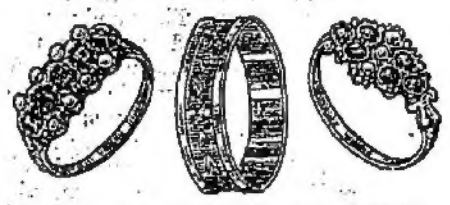
Any person sending in one new subscriber to the WEEKLY WITNESS, at $1.10, or four new subscribers to the MESSENGER, at 30c each (and stating that it is for a picture), will receive a chromo of Earl Dufferin, or the Countess of Dufferin, as may be preferred, size 11 x 14 inches.

Anyone sending in two new subscribers to the WEEKLY WITNESS, or eight for the NORTHERN MESSENGER, or one new subscriber to the NEW DOMINION MONTHLY, at $2 (and stating they are working for the pictures), will receive the pair of chromos, which will make very nice ornaments.

A GOLD LOCKET

will be given to any person who sends in $6 in new subscriptions to the WITNESS publications.

FOR GIRLS ONLY.



GOLD AND JEWELLED RINGS.

This is a present exclusively for girls (little or grown-up), and for those who intend to present the prize to their lady friends. The Gold Keeper shown in the centre of the engraving retails at $2, and will be mailed to anyone sending us $5 in new subscriptions to the WITNESS PUBLICATIONS. The Gold Ring with eight pearls and five stones retails at $4; it will be mailed to anyone who sends $10 in new subscriptions to the WITNESS PUBLICATIONS. The Gold Ring with three pearls and six stones retails at $5; it will be mailed to anyone sending $13 in new subscriptions to the WITNESS PUBLICATIONS. If the competitors prefer they can obtain rings of greater value on equally advantageous terms. For example, if they send $50 in new subscriptions, they would receive by return mail a ring which they would have to pay $20 for at any retail store; and such a ring would be a pretty good one. A lady in sending for any of these rings should send a piece of paper or thread the size of her finger, so that one to fit may be obtained.

A Handsome

PHOTOGRAPH ALBUM

which retails at $2.25, will be mailed to all who send $7 in new subscriptions to the WITNESS PUBLICATIONS.

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DO NOT FORGET THEM!

Every letter must be marked "In competition," or otherwise express the intention to compete for one or more of these prizes.

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You can obtain sample copies, directions for working and any other information at any time by writing to

JOHN DOUGALL & SON,
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